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quick facts on...

# Everglades Restoration Progress

DECEMBER 2007

## The Everglades – Challenges and Solutions

America's Everglades was once a vibrant, free-flowing "river of grass," extending from the Kissimmee Chain of Lakes near Orlando...all the way to the southernmost tip of the peninsula at Florida Bay.

Over time, significant development took place within the region, allowing for tremendous population and economic growth. The construction of canals and water control structures, along with increased urban and agricultural water needs, contributed to unintended consequences – loss of 50% of wetlands and floodplains, disrupted timing of water flows, deterioration of water quality, reductions in wading birds, declining lake and estuary health and loss of native habitat to exotic species.

Recognizing that a healthy ecosystem is vital to a healthy economy, a number of initiatives and construction projects are now under way to revitalize and protect this national treasure. A key focus is implementation of the Comprehensive Everglades Restoration Plan (CERP), an unprecedented State-Federal partnership to improve water quality, quantity, timing and delivery.

## Funding

- The State of Florida, the Florida Legislature and the South Florida Water Management District have appropriated \$2.4 billion toward the Comprehensive Everglades Restoration Plan, including the nation's first-ever use of Certificates of Participation funding for a natural resources project.
- An additional \$1.8 billion has been invested in Everglades water quality improvements to implement State mandates.
- Another \$250 million has been committed to the Lake Okeechobee and Estuary Recovery Plan and the Northern Everglades Initiative, with a commitment of \$100 million for future subsequent years.

- Also, through current fiscal year 2008 and prior appropriations, the State and SFWMD have provided \$194 million for Lake Okeechobee restoration.

## Land Acquisition

- As of September 30, 2007, 56 percent, or 217,584 acres of lands needed to implement the Comprehensive Everglades Restoration Plan have been acquired.
- Aggressive land acquisition has averaged 11,800 acres per year for the last two years.

## Water Quality Improvements

- The State of Florida is implementing water-quality improvements and lowering phosphorus levels in Everglades-bound waters. This is being accomplished through the implementation of farming Best Management Practices (BMPs) and construction of Stormwater Treatment Areas (STAs) in compliance with the Everglades Forever Act.
- At present, 52,000 acres of land south of Lake Okeechobee have been converted to STAs, yielding 45,000 acres of effective treatment marsh. One of them, at almost 17,000 acres, is the largest constructed wetland in the world. Another 12,000 acres are currently under design and are scheduled to be flow-capable by the end of 2010.
- Everglades Agricultural Area landowners continue to meet phosphorus load reduction requirements through the use of BMPs. The most recent three-year trend shows a 40-percent reduction, well above the amount required by law.
- To date, BMPs and STAs combined have prevented more than 2,600 metric tons of phosphorus from entering the Everglades. A decade ago, phosphorus concentrations leaving the EAA averaged 170 parts per billion. They now average below 50 ppb and have been documented as low as 12 ppb.



## The South Florida Water Management District

is a regional, governmental agency that oversees the water resources in the southern half of the state. It is the oldest and largest of the state's five water management districts.

**Our Mission** is to manage and protect water resources of the region by balancing and improving water quality, flood control, natural systems and water supply.

## Acceler8 Fast-Track Projects

- **Everglades Agricultural Area Stormwater Treatment Area Expansion** will reduce phosphorus levels and help achieve state water quality standards for the Everglades. Construction of initial expansion components is complete and operational; design is under way for secondary components, creating a total of 18,000 acres of additional treatment wetlands.
- **Everglades Agricultural Area Reservoir A-1** will capture, move and store regulatory releases from Lake Okeechobee, reducing harmful discharges to the estuaries. Test cell construction and monitoring are complete. Construction of the seepage canal and design of the pump station and reservoir embankment are under way.
- **C-43 West (Caloosahatchee River) Reservoir and C-44 (St. Lucie Canal) Reservoir/STA** will improve estuary health. Test cell construction and monitoring for both reservoirs is complete. Intermediate project designs are also complete, and final designs are in progress.
- **Biscayne Bay Coastal Wetlands Phase 1** will restore natural water flows to Biscayne Bay and Biscayne National Park. Nearby, the **C-111 Spreader Canal** project will restore wetland and estuarine ecosystems. Design has been initiated for both projects.
- **Water Preserve Areas** will improve water availability and flow in the Everglades. Initial design is under way or complete for the project's five components. Pending appropriations, the U.S. Army Corps of Engineers may assume final design and construction on four of them. The Acme Basin B Discharge C-1 canal improvements and pump station project is complete and is rerouting runoff into a stormwater treatment area before discharge to the Arthur R. Marshall Loxahatchee National Wildlife Refuge.
- **Picayune Strand Restoration** will reestablish natural sheet flow to enhance wetlands and regulate freshwater inflow to the Ten Thousand Islands Estuary. Portions of the Prairie Canal have been filled in, along with the first phase of road removal, yielding 13,000 acres of restored area to-date. Design is under way for the levees, canals, pump stations and roads, which will be constructed by the U.S. Army Corps of Engineers.
- Part of the **North Palm Beach County – Part 1** project is complete, and construction continues on the L-8 Reservoir, with almost 25,000 acre-feet of storage now available. This project will improve water levels in the Loxahatchee Slough and increase freshwater deliveries to the Northwest Fork of the Loxahatchee River during dry periods.
- **Aquifer Storage and Recovery (ASR) Pilot Projects** are under way to investigate technology previously untried on the regional scale envisioned in the Comprehensive Everglades Restoration Plan. Cycle testing of several facilities, including the Hillsboro ASR pilot project, will begin in early 2008.
- The **Lake Trafford Restoration** project is nearly complete. This lake is headwater to the Corkscrew Regional Ecosystem Watershed (CREW), which covers 11,000 acres of pristine wetlands. Several million cubic yards of organic sediment are being dredged from the lake bottom to improve water quality.
- Construction of Phase I of the **Western Tamiami Trail Culverts** project was completed in May 2006.
- Completion of the **Lake Okeechobee Water Retention/Phosphorus Removal** project was celebrated in April 2006. Consisting of two new Stormwater Treatment Areas within the Taylor Creek/Nubbin Slough basin, this project will improve the quality of water flowing into Lake Okeechobee.
- The **Ten Mile Creek Water Preserve Area** project was completed in April 2006. This project moderates high-volume freshwater flows and salinity levels in the St. Lucie Estuary and reduces sediment and nutrient loads to benefit estuarine habitat.
- Construction of the **Western C-11 Water Quality Improvement** project was completed in 2005. This project helps to improve the quality of water discharged from the C-11 basin into Water Conservation Area 3A.

## Northern Everglades and Estuaries Protection

- Underscoring the State's commitment to greater Everglades ecosystem restoration, the Florida Legislature in 2007 expanded the Lake Okeechobee Protection Act to include protection and restoration of the interconnected Kissimmee, Lake Okeechobee, Caloosahatchee and St. Lucie watersheds.
- This interagency initiative is focusing on the water storage and water treatment needed to help improve and restore the Northern Everglades and coastal estuaries.

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